

## WHAT IS CLAIMED IS:

1. A compressor comprising:
- a compressor mechanism, said compressor mechanism having a function for compressing and vomiting a refrigerator, and
- a motor driving said compression mechanism;
- wherein said motor includes a stator core having a plurality of teeth parts, a concentrated winding applied over each teeth part of said plurality of teeth parts and a rotor incorporating a plurality of permanent magnets;
- said stator core is formed in an annular form by combining said plurality of core elements, and
- each of said plurality of permanent magnets is provided at a larger pitch than the stator coil pitch.
2. The compressor of claim 1, wherein said rotor further includes an iron as a flux of magnetic induction, said iron being disposed between said each permanent magnet.
3. A compressor comprising:
- a compression mechanism, said compressor mechanism having a function for compressing and vomiting a refrigerator, and
- a motor driving said compression mechanism,

5 wherein said motor includes a stator core having a plurality of teeth  
6 parts, a concentrated winding applied over each teeth part of said plurality of teeth  
7 parts and a rotor incorporating a plurality of permanent magnets,

8 said stator core is formed in an annular form by combining said  
9 plurality of core elements, and

10 each of said plurality of permanent magnets is provided at a larger  
11 pitch than the stator coil pitch.

1 4. The compressor of claim 3 wherein said each teeth part  
2 includes an outer circumference part, and said each teeth part is combined by  
3 fitting parts disposed at end portion of said outer circumference part.

1 5. A compressor comprising:

2 a compression mechanism, said compressor mechanism having a  
3 function for compressing and vomiting a refrigerator, and

4 a motor driving said compression mechanism,

5 wherein said motor includes a stator core having a plurality of teeth  
6 parts, a concentrated winding applied over each teeth part of said plurality of teeth  
7 parts and a rotor incorporating a plurality of permanent magnets,

8 each of said plurality of permanent magnets is provided at a larger  
9 pitch than the stator coil pitch,

10 said plurality of permanent magnet are arranged around a center  
11 thereof,

12 at least one of said plurality of permanent magnets has a magnet  
13 forward portion and a magnet backward portion each having respective surfaces  
14 facing said stator core and angled toward each other.

1 6. A compressor comprising:

2 a compression mechanism, said compressor mechanism having a  
3 function for compressing and vomiting a refrigerator, and

4 a motor driving said compression mechanism,

5 wherein said motor includes a stator core having a plurality of teeth  
6 parts, a concentrated winding applied over each teeth part of said plurality of teeth  
7 parts and a rotor incorporating a plurality of permanent magnets,

8 each of said plurality of permanent magnets is provided at a larger  
9 pitch than the stator coil pitch,

10 said plurality of permanent magnet are arranged around a center  
11 thereof, and

12 at least one of said plurality of permanent magnets has a side facing  
13 said stator core which is indented inward towards the center.

1 7. A compressor comprising:

2 a compression mechanism, said compressor mechanism having a  
3 function for compressing and vomiting a refrigerator, and

4 a motor driving said compression mechanism,

5 wherein said motor includes a stator core having a plurality of teeth  
6 parts, a concentrated winding applied over each teeth part of said plurality of teeth  
7 parts and a rotor incorporating a plurality of permanent magnets,

8 each of said plurality of permanent magnets is provided at a larger  
9 pitch than the stator coil pitch, and

10 a first outer periphery portion of said rotor is different shape than a  
11 second outer periphery portion of said rotor without said second outer periphery  
12 portion being situated directly between any of said magnet.

1 8. An air-conditioner comprising:

2 a compressor of claim 1,

3 a heat exchanger, and

4 a refrigerating cycle connecting said compressor and said heat  
5 exchanger.

1 9. A refrigerator comprising:

2 a compressor of claim 1,

3 a heat exchanger, and

4 a refrigerating cycle connecting said compressor and said heat  
5 exchanger.

*Adm. A<sup>8</sup>*